



## **PERIODIC REVIEW**

**Wesmar Facility  
Facility Site ID#: 53673885**

**18500 68<sup>th</sup> Avenue (former),  
6830 NE 185<sup>th</sup> (current),  
Bothell, Washington**

**Northwest Region Office**

**TOXICS CLEANUP PROGRAM**

**January 2010**

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## 1.0 INTRODUCTION

This document is a review by the Washington State Department of Ecology (Ecology) of post-cleanup site conditions and monitoring data to ensure that human health and the environment are being protected at the former Wesmar Facility (Site). Cleanup at this Site was implemented under the Model Toxics Control Act (MTCA) regulations, Chapter 173-340 Washington Administrative Code (WAC).

Cleanup activities at this Site were completed under the Independent Remedial Action Program (IRAP). The cleanup actions resulted in concentrations of petroleum hydrocarbons remaining at the Site which exceed MTCA cleanup levels. The MTCA cleanup levels for soil are established under WAC 173-340-740. The MTCA cleanup levels for groundwater are established under WAC 173-340-720. WAC 173-340-420 (2) requires that Ecology conduct a periodic review of a site every five years under the following conditions:

- (a) Whenever the department conducts a cleanup action
- (b) Whenever the department approves a cleanup action under an order, agreed order or consent decree
- (c) Or, as resources permit, whenever the department issues a no further action opinion;
- (d) and one of the following conditions exists:
  - 1. Institutional controls or financial assurance are required as part of the cleanup
  - 2. Where the cleanup level is based on a practical quantitation limit
  - 3. Where, in the department's judgment, modifications to the default equations or assumptions using site-specific information would significantly increase the concentration of hazardous substances remaining at the site after cleanup or the uncertainty in the ecological evaluation or the reliability of the cleanup action is such that additional review is necessary to assure long-term protection of human health and the environment.

When evaluating whether human health and the environment are being protected, the factors the department shall consider include [WAC 173-340-420(4)]:

- (a) The effectiveness of ongoing or completed cleanup actions, including the effectiveness of engineered controls and institutional controls in limiting exposure to hazardous substances remaining at the site;
- (b) New scientific information for individual hazardous substances or mixtures present at the site;
- (c) New applicable state and federal laws for hazardous substances present at the Site;
- (d) Current and projected site use;
- (e) Availability and practicability of higher preference technologies; and
- (f) The availability of improved analytical techniques to evaluate compliance with cleanup levels.

The Department shall publish a notice of all periodic reviews in the Site Register and provide an opportunity for public comment.

## **2.0 SUMMARY OF SITE CONDITIONS**

### **2.1 Site Description and History**

The subject property originally had the address of 18500-18536 68<sup>th</sup> Avenue NE, in Bothell (Kenmore), King County, Washington. Now it is 6830 NE 185<sup>th</sup>. It was bounded on the north by a mini-storage facility, to the east by a former landfill and wooded area, to the south by the City of Seattle Tolt River Pipeline right-of-way, and on the west by 68<sup>th</sup> Avenue NE. Land use in the Site vicinity consists of residential apartments, a utility distribution station, commercial storage, and office space. Anecdotal information suggests that landfill activities may also have taken place on the subject property.

The former WESMAR property (Site or property) is comprised of 4.3 acres with three buildings, all with on-grade concrete slab flooring. The WESMAR Co. was using the north building as a machine shop, a painting room, general-use storage areas, and office space. The south building was used as the executive, sales and engineering offices, engineering test/development areas, computer room, lunchroom, photography darkrooms, materials stockroom, and production assembly and test areas. The east building did not exist at the time of WESMAR property occupation. The buildings were occupied by WESMAR for development and production of marine sonar and electrical equipment. Access to the property, now used by the Northshore Utility District was and is via a main gate on the southwest corner of the property near the intersection of NE 185<sup>th</sup> Street and 68<sup>th</sup> Avenue NE.

The property is located in the SW 1/4 of Section 1, Township 26 North, Range 4 East, Kenmore, King County, Washington. The elevation at the site is approximately 40 feet above Mean Sea Level. Topographical relief across the Site is on the order of two to three feet with a slope to the east. The nearest surface water is a surface drainage which flows east and south along the eastern border of the property. Surface water flows to a wetland area approximately 500 feet east of the property.

A geologic map and hydrogeologic information indicates the site and site vicinity is underlain by unconsolidated undifferentiated stratified drift of Quaternary age designated the Vashon drift. The drift consists of a light gray sand and gravel and is indicative of an outwash channel terrace. The hill to the west of the property consists of glacial fill. The drift may be up to 100 feet thick in areas, but is relatively thin at the property. Additionally, soil borings completed by Earth Consultants, Inc. (ECI) in 1982 indicated up to ten feet of peat and organic material overlying the drift deposits.

Shallow wells in the Site vicinity reportedly supply adequate volumes of water for domestic use. This may be perched water, and elsewhere in the region the drift is capable of supplying larger volumes for municipal use. Soil borings and a monitor well at the property, completed in 1982 indicated static water levels of between two and six feet below ground surface (bgs). Based on the local topography, regional groundwater flow is inferred to be east to southeast towards the wetland area and Swamp Creek one-half mile east of the subject property. Swamp Creek flows

south, and is tributary to the Sammamish River and Lake Washington, located approximately ¼-mile south of the property. The Kroll land ownership map (1941) listed the property under the name of “Gilbert.” The property appears as cleared and undeveloped in a 1944 aerial photograph. There appears to be limited clearing and light residential development in the area. The main arterial streets are in place. The property by 1947 is listed as owned by “O’Berg” (Kroll). The listed ownership of the property changed from Lilly O. Berg to Ernest J. Rice in 1948. The property is undeveloped in 1949, and illustrates the continued residential and street build-up in the area. The listed property was transferred from E. Rice to Ed and Beatrice Lerdaahl in 1951, and in 1953, the Site was an undeveloped parcel with some clearing with a wetland area to the east (topographic map). The 1954 Kroll map lists the property owner as “Rice.” A Puget Sound Power and Light easement lies along the south border of the property. The property is occupied by a single residential-scale building in 1961. Ownership is listed as Herman and Mae Kathman, and the adjoining property to the east remains forested. The subject property is listed in 1963, as Excavators, Inc. (Patty O. English) and according to other sources is an excavator/contractor’s business. The property appears developed in 1964 with additional buildings and stockpiles of soil appear on the property. The North Seattle Suburban Polk directory for 1967 lists the property (18504 68th Avenue Northeast) as “Excavators, Inc.” In 1970, the site has an additional commercial-scale building and a cleared area extends to the east. The 1974 Kroll depicts a single commercial-scale building on the property and lists its owner as “English. In 1977, the Polk directory lists the property as unchanged. The “Edmonds East, Washington” 7.5 minute quadrangle maps (1981) indicated the property as being wholly cleared. The 1980-81 Polk Directory lists the property as storage. The 1983 Polk lists 18504 68th Avenue Northeast as a Puget Power substation. From other sources, this substation is adjacent to the west of the subject property. In 1981, Badger Construction, Inc. is listed for the property and in 1982, the ownership was transferred to Western Marine Electronics Company (WESMAR). By 1984, the site is cleared and developed with a commercial-scale building. In 1985, two commercial-scale buildings appear on the site and a cleared area extends eastward from the property. The 1987-88 Cole directory lists the property (18500 68th Avenue Northeast) as “Snopac Products” and “Western Marine Electronics.” Between 1989 and 1994, the property appears unchanged in aerial photographs.

Three above ground storage tanks (ASTs) were observed during a June 1995 Phase I Site Assessment by Dames and Moore inside the south building adjacent to the sonar testing area. One tank has dimensional measurements of approximately 6 feet diameter by 12 feet long, and the other two tanks are 3 feet diameter by 12 feet long. Each of the three tanks was observed to be approximately 60 to 80% full of water and no indications of oils or other floating debris were observed. These three tanks were reportedly utilized for sonar testing operations of production hardware manufactured at the WESMAR facility. Reportedly, the tank water is discharged to the local sewer and refilled on an approximately annual basis. No documentation or maintenance logs were available to indicate the conditions of the water upon discharge to the sewer or during maintenance and operating conditions. No underground storage tanks (USTs) were reported to be present or observed on the subject property. There was a work proposal on file at WESMAR indicating removal of four (4) underground fuel tanks and backfilling of the holes as part of the planned construction. The status of the proposed USTs removal and location of the four USTs

was not ascertained. No additional records or information was obtained to determine the existence, removal, tank conditions, or location of the four fuel tanks.

## 2.2 Site Investigations and Sample Results

The Ground Penetrating Radar (GPR) and electro-magnetic (EM) geophysical surveys were conducted on 8-25-95 and 8-28-95 by Geo Recon International. In addition to being used to search for the former USTs and the subsurface extent of the landfill, the boring locations were cleared for underground utilities. An EM device was used to locate buried metal objects. When a metal object was located, it was then investigated with GPR to determine the relative depth, size, and ground projection of the object and to determine if the object was possibly a UST.

Samples of liquid and sludge were collected by a Dames & Moore chemist using a wide mouth jar secured to a fiberglass pole with cloth-tape. The liquid sample was retrieved by dipping the jar into the sump and then pouring the retrieved liquid into an appropriate laboratory prepared bottle. The sludge sample was retrieved in a similar manner. A total of eleven subsurface borings (SP-1 through SP-10, and HA-2) and one hand auger boring (HA-1) were completed on August 29, 1995 to provide an assessment of soil, soil gas and groundwater quality. Eight of these borings were located in the asphalt paved parking area on the central and western portion of the property (SP- 1 through SP-5) and the grassy area east of the buildings (SP-6 through SP-8). One boring (HA-1) was located near the compressor on the west side of the north building. Boring HA-2 was located near the southeast corner of the south building outside the wall adjacent to the sonar testing trough. Two borings (SP-9 and SP-10) were completed adjacent to a geophysical anomaly suspected to be the location of the former USTs. Dames & Moore subcontracted Transglobal Environmental Geosciences Northwest, Inc. (TEG) to complete the borings using a truck-mounted Strataprobe. Monitoring of the drilling and sampling was performed by a Dames & Moore soils engineer. The soils engineer maintained a detailed log of the subsurface materials encountered and recorded organic vapor readings from an organic vapor monitor (OVM) used to field screen the soils and borehole for organic vapors. Particular attention was given to noting evidence of petroleum hydrocarbons or other organic contaminants such as visible soil staining or discoloration, elevated organic vapors (VOCs), or odors. Soil gas samples were collected from the borings by driving the Strataprobe to 1½ feet below ground surface (bgs), extracting the tooling approximately six inches to remove the disposable drive tip. This allows soil gas to enter the hollow interior of the drill pipe. A length of tubing attached to a threaded stainless steel assembly was the lowered into the interior of the drill pipe and securely attached to form an air tight seal. A syringe was then used to draw air from the soil. The soil gas samples were immediately taken to the TEG onsite mobile laboratory for cool storage and subsequent analysis. After the soil gas samples were collected, the OVM was attached to the tubing to measure the concentration of organic vapors that may be present. Soil samples were collected from borings SP-1 through SP-10 and HA-2 at a depth anticipated to be just above the groundwater surface. The samples were collected using a split-spoon sampler driven 24 inches with the Strataprobe. At boring HA-1, a stainless steel hand-auger was used to collect the sample. The sample jar was then sealed with a tight fitting cap and immediately taken to the TEG on site mobile laboratory for cool storage and subsequent analysis. Excess soil from each sample was screened in the field for organic vapor emission using an OVM. The soils from the sampler were placed in a sealed

plastic bag and then mixed and shaken to volatilize organic compounds that may have been present. The OVM probe was then inserted into the bag to allow measurement of the vapors. The OVM was calibrated at the beginning of the day using a known standard of isobutane.

The groundwater samples were collected from the borings by driving the Strataprobe approximately two to three feet below the groundwater surface and then extracting the tooling approximately two feet to expose a screened tube in which water could accumulate. Clean tubing was then lowered through the Strataprobe drill pipe and into the accumulated water. A syringe was used to draw the water sample into the tubing. After the tubing had filled the water sample was then transferred to a laboratory prepared glass vial and sealed with a tight fitting cap. The samples were then immediately taken, under chain of custody protocol, to the TEG on site mobile laboratory for cool storage and subsequent analysis.

Geophysical evidence of USTs was not encountered in the parking/roadway areas between the two buildings on the site, or in the parking areas west and east of the buildings. There was one anomalous area encountered south of the east end of the north building. This anomalous area was interpreted to be gravel fill which could be the result of the reported former UST removal. It was estimated that this fill may be to a depth of 10 feet and cover an area of 30 by 30 feet. This fill area may also extend beneath the building. Soil borings SP-9 and SP-10 were located in this area for this reason. The grassy area to the east of the building was also surveyed and no evidence for USTs was detected. However, anomalies encountered were indicative of metal debris possibly consisting of discarded pipe and other metal objects. The survey of the asphalt area south and west of the two buildings detected anomalies interpreted to be numerous large pipe-like objects such as logs buried in the past.

Sumps, drains, and openings in the asphalt cover were screened for combustible gases and organic vapor emissions at 36 locations on the property. Low levels were detected at three of these locations.

The soils samples were collected typically within the depth range of 1 to 5 feet bgs. One soil sample was collected per boring location. The soils sampled typically consisted of a mixture of brown and gray silty fine to medium sand. In the grassy area east of the buildings, the soil density appeared to be soft to medium dense and denser near the surface. Some peat and decomposing wood debris was encountered in these samples. In the parking areas the soil was medium dense to dense within the top 2 to 4 feet and was overlain with 6 inches of gravel base course beneath the asphalt. The geotechnical study conducted at this site by Earth Consultants, Inc. in 1992 indicated the presence of a layer of peat up to 10 feet thick beginning at a depth of 5 feet in the west portion of the site. This is generally consistent with our findings at boring location SP-4 where peat soils were sampled at a depth of 4 feet.

Selected soil samples were analyzed for Total Petroleum Hydrocarbons (TPH). TPH as oil was analyzed for and detected in soil samples HA-1 and HA-2 at concentrations of 1750 milligrams per kilogram (mg/kg) and 280 mg/kg, respectively. Soil samples from boring locations SP-4 through SP-10 were analyzed for TPH as gasoline, diesel, and oil by Washington Method TPH hydrocarbon identification (WTPH-HCID). When TPH was detected above the screening level

for this method, additional analysis was conducted to quantify the concentrations of hydrocarbon constituents detected. The results of the analyses indicate TPH was not detected above the detection limits in the samples from SP-1 through SP-6 and SP-9. Soil sample SP-7 contained TPH as gasoline, diesel, and oil at concentrations of 266 mg/kg, 969 mg/kg, and 1450 mg/kg, respectively. Analysis on the soil samples collected from SP-8 and SP-10 indicated TPH as oil at concentrations of 380 mg/kg and 742 mg/kg, respectively. These concentrations are all above the MTCA method A cleanup levels for TPH as gasoline (100 mg/kg), diesel (200 mg/kg) and oil (200 mg/kg). Soil samples from boring locations SP-1 through SP-8 were also analyzed for specific VOCs. VOCs were not detected in the samples from SP-1 through SP-6 and SP-8. Analysis of soil from SP-7 indicated concentrations of toluene, ethylbenzene, and xylene of 0.71 mg/kg, 1.29 mg/kg, and 7.82 mg/kg respectively. These concentrations are below the MTCA method A cleanup levels of 40.0 mg/kg, 20.0 mg/kg, and 20.0 mg/kg respectively.

Groundwater samples from boring location SP-1 through SP-8, SP-10, and HA-2 were analyzed for specific VOCs. VOCs were not detected in groundwater samples from SP-1, SP-4 through SP-10, and HA-2. The analytical results for the samples collected from SP-2 and SP-3 indicated concentrations of toluene of 77 micrograms per liter (ug/L) and 33 ug/L, respectively. The concentration detected in SP-2 exceeds MTCA method A cleanup level for toluene in groundwater of 40 ug/L.

Soil gas samples from borings SP-1 through SP-9 were collected and analyzed for VOCs. The soil gas sample collected from SP-3 contained concentrations of toluene, ethylbenzene, xylene and 1,1,1 trichloroethane of 2.01 parts per million by volume (ppmv), 0.10 ppmv, 0.38 ppmv, and 0.30 ppmv respectively. The soil gas sample collected from SP-8 had a benzene concentration of 0.03 ppmv. These concentrations are very low and do not exceed regulatory levels for worker exposure. Methane was detected in all the samples. The concentrations of methane detected are all well below the lower explosive limit of 5% (50,000 ppmv).

PCBs were not detected at or above the reported detection limits. Due to interference from the hydrocarbons, detection limits were elevated slightly. Elevated concentrations of cadmium and lead were detected in the sludge sample. None of the other metals detected in the sludge or liquid are at significantly elevated concentrations.

TPH as diesel and oil were detected at concentrations of 1000 mg/L and 6200 mg/L, respectively in liquid and 55,000 mg/kg and 360,000 mg/kg, respectively for sludge. The VOCs acetone and 2-butanone were detected in both the sump sludge and liquid. Toluene, ethylbenzene, and styrene were also detected in the sludge.

## 2.3 Cleanup Actions

No record of soil removal exists in the Ecology file, nor is there any report which is referred to as the "Final Cleanup Report". It can be inferred from various other reports and Ecology responses, i.e., "conditional 'No Further Actions' (NFA) letters", that the contaminated soil was adequately contained, controlled, and isolated to protect health, and institutional controls were and are in effect. Groundwater, on the other hand, has not been shown to be protected, or to meet cleanup



requirements at a conditional point of compliance established in accordance with the MTCA regulations. Furthermore, there is no record in Ecology files that a “condition” of the October 5, 1999 Ecology NFA letter, was ever fulfilled. That “condition” was to monitor groundwater “until there are four consecutive quarters of data indicating that the levels of petroleum hydrocarbons are below MTCA Method A cleanup standards.” The last monitoring report in Ecology files, dated April 8, 2002, written by Nelson Geotechnical Associates, Inc., shows MW-2 still exceeding standards. Therefore, it is possible that the NFA letter(s) will be rescinded.

## 2.4 Cleanup Levels

Method A cleanup standards were used for comparison purposes and at the point of compliance. A conditional points of compliance was used for both soil, and possibly could be applied to groundwater with more information about proximity to the source and a cost benefit analysis. One or more of the cleanup levels for TPH were exceeded in 5 of the 12 soil samples analyzed. Based on the field observations, shallow depth to groundwater, and available information regarding the probable source of these hydrocarbons, it was the opinion of the environmental consultants that the lateral and vertical extent of the detected hydrocarbons are relatively limited with the possible exception of SP-7 in the landfill area. Low levels of methane and/or VOCs were detected in each of the soil gas samples. Organic vapors were detected at low levels at two of the nine surface survey locations. Based on these results, the occurrence of methane and VOCs are not considered to be significant with respect to exposure to onsite workers or a potential for accumulation of methane to potentially explosive levels. Toluene was the only VOC detected in groundwater samples from the site. The MTCA Method A groundwater cleanup level for the compounds detected are 40 ug/L for toluene. This was exceeded in only one of the two samples in which toluene was detected. Given its isolated occurrence and the detected concentration, it was thought that this occurrence was not significant with respect to the overall environmental conditions at the subject property.

## 2.5 Restrictive Covenant

Based on the Site use, surface cover and cleanup levels, it was determined that the Site was eligible for a ‘No Further Action’ determination (after groundwater monitoring was successful) if a Restrictive Covenant was recorded for the property. A Restrictive Covenant was recorded for the Site in 1999 which imposed the following limitations:

Section 1. No groundwater may be taken for any use from the Property.

A portion of the Property contains total petroleum hydrocarbons contaminated soil located at

- (1) Soil in the grassy area on the east side of the property in the vicinity of SP-7, SP-8, B-12, B-13, and MW-2
- (2) Soil in the area at the southeast corner of the north building in the vicinity of SP-10 and B-14
- (3) Soil in the area at the southeast corner of the south building in the vicinity of HA-2 and HA-5
- (4) Soil inside the compressor shed.

The Owner shall not alter, modify or remove the existing structures in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

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Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bear capability, piercing the surface with a rod, spike or similar item, bulldozing, or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action, to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

The Restrictive Covenant is available as Appendix 6.4.

## **3.0 PERIODIC REVIEW**

### **3.1 Effectiveness of completed cleanup actions**

The Restrictive Covenant for the Site was recorded and is in place. This Restrictive Covenant prohibits activities that will result in the release of contaminants at the Site without Ecology's approval, and prohibits any use of the property that is inconsistent with the Covenant. This Restrictive Covenant serves to ensure the long term integrity of the remedy.

Based upon the site visit conducted on January 27, 2010, the building and asphalt cover (remedy) at the Site continue to eliminate exposure to contaminated soils by ingestion and contact. The asphalt appears in satisfactory condition and no repair, maintenance, or contingency actions have been required. The Site is operating as a Northshore Utility District facility. A photo log is available as Appendix 6.5.

Soils with petroleum concentrations higher than MTCA cleanup levels are still present at the Site. However, the remedy prevents human exposure to this contamination by ingestion and direct contact with soils. The Restrictive Covenant for the property will ensure that the soil contamination remaining is contained and controlled. It has not yet been shown that groundwater is protected.

### **3.2 New scientific information for individual hazardous substances for mixtures present at the Site**

There is no new scientific information for the contaminants related to the Site.

### **3.3 New applicable state and federal laws for hazardous substances present at the Site**

The cleanup at the site was governed by [insert appropriate edition, like: Chapter 173-340 WAC (1996 ed.)]. WAC 173-340-702(12) (c) [2001 ed.] provides that,

“A release cleaned up under the cleanup levels determined in (a) or (b) of this subsection shall not be subject to further cleanup action due solely to subsequent amendments to the provision in this chapter on cleanup levels, unless the department determines, on a case-by-case basis, that the previous cleanup action is no longer sufficiently protective of human health and the environment.”

Although cleanup levels changed for petroleum hydrocarbon compounds as a result of modifications to MTCA in 2001, contamination remains at the site above the new MTCA Method A and B cleanup levels. Even so, the cleanup action is still protective of human health and the environment. A table comparing MTCA cleanup levels from 1991 to 2001 is available below.

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Analyte	1991 MTCA Method A Soil Cleanup Level (ppm)	2001 MTCA Method A Soil Cleanup Level (ppm)	1991 MTCA Method A Groundwater Cleanup level (ppb)	2001 MTCA Method A Groundwater Cleanup Level (ppb)
Cadmium	2	2	5	5
Lead	250	250	5	15
TPH	NL	NL	1000	NL
TPH-Gas	100	100/30	NL	1000/800
TPH- Diesel	200	2000	NL	500
TPH-Oil	200	2000	NL	500

NL = None listed

### 3.4 Current and projected site use

The site is currently used for Northshore Utility District purposes. There have been no changes in current or projected future site or resource uses.

### 3.5 Availability and practicability of higher preference technologies

The remedy implemented included containment of hazardous substances, and it continues to be protective of human health and the environment. While higher preference cleanup technologies may be available, they are still not practicable at this Site.

### 3.6 Availability of improved analytical techniques to evaluate compliance with cleanup levels

The analytical methods used at the time of the remedial action were capable of detection below selected site cleanup levels. The presence of improved analytical techniques would not affect decisions or recommendations made for the site.

## **4.0 CONCLUSIONS**

The following conclusions have been made as a result of this periodic review:

- The cleanup actions completed at the Site appear to be protective of human health, but it has not been shown that the environment (groundwater) is protected.
- Soils cleanup levels have not been met at the standard point of compliance for the Site; however, the cleanup action has been determined to comply with cleanup standards since the long-term integrity of the containment system is ensured, and the requirements for containment technologies are being met.
- The Restrictive Covenant for the property is in place and continues to be effective in protecting public health from exposure to hazardous substances and protecting the integrity of the cleanup action.

Based on this periodic review, the Department of Ecology has determined that the requirements of the Restrictive Covenant continue to be met. However, additional cleanup actions may be required of the property owner to achieve NFA status, since the groundwater has not been shown to meet requirements at any point of compliance. It is the property owner's responsibility to continue to inspect the site to assure that the integrity of the asphalt cover is maintained.

### **4.1 Next Review**

The next review for the site will be scheduled five years from the date of this periodic review. In the event that additional cleanup actions or institutional controls are required, the next periodic review will be scheduled five years from the completion of those activities.

## 5.0 REFERENCES

Dames and Moore Phase I Environmental Site Assessment and Asbestos Assessment, dated July 19, 1995;

Dames and Moore Phase II Environmental Site Assessment, dated September 22, 1995;

Dames and Moore Supplemental Phase II Environmental Site Assessment, dated November 20, 1995;

Nelson-Couvrette and Associates, Inc. Environmental Sampling Letter, dated February 23, 1999;

Nelson-Couvrette and Associates, Inc. Environmental Sampling Letter, dated October 27, 1999;

Nelson-Couvrette and Associates, Inc. Environmental Sampling Letter, dated February 16, 2000;

Nelson-Couvrette and Associates, Inc. Environmental Sampling Letter, dated August 24, 2000;

Nelson and Associates, Inc. Environmental Sampling Letter, dated February 26, 2001;

Nelson and Associates, Inc. Environmental Sampling Letter, dated April 8, 2002;

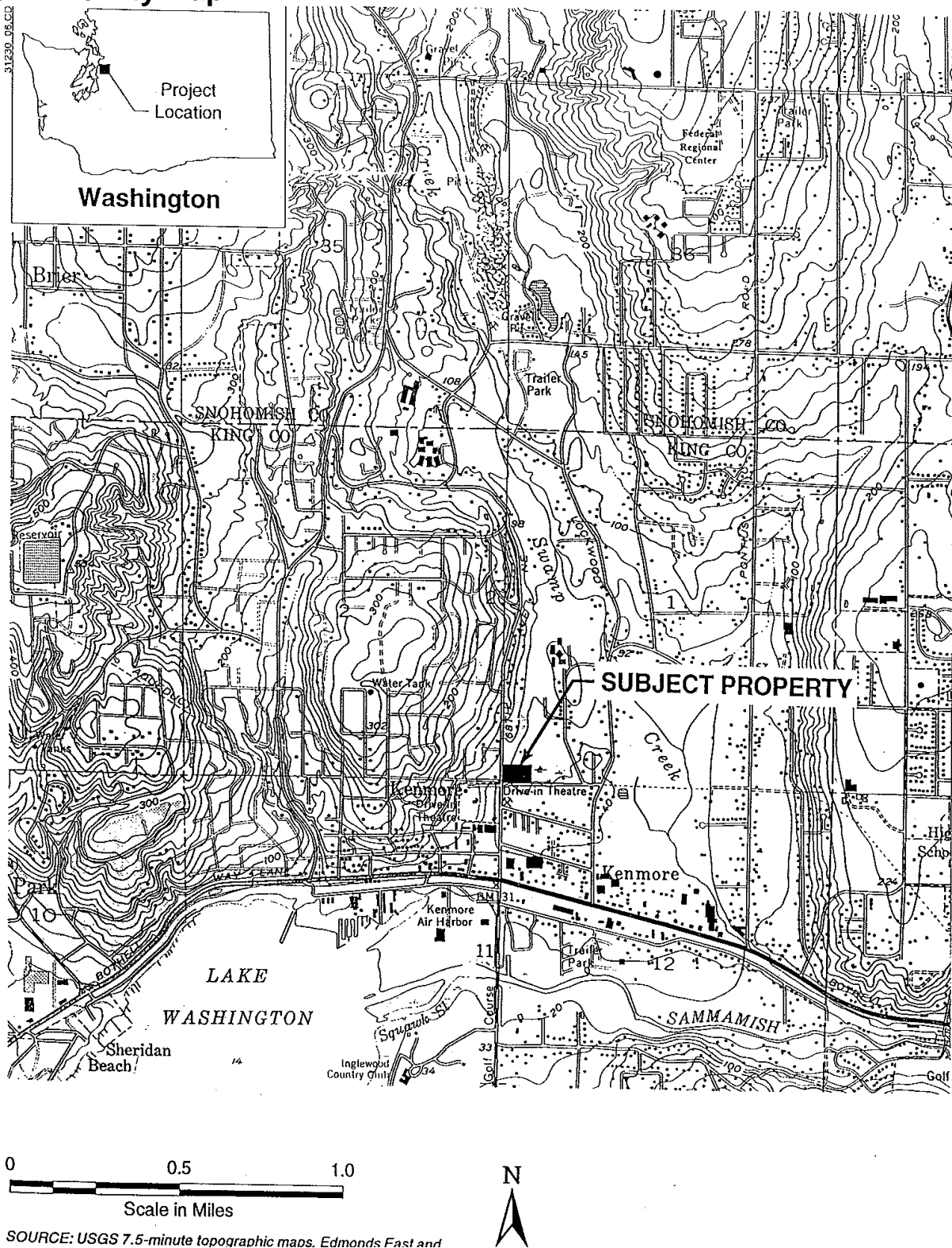
Ecology, 1999, Restrictive Covenant.

Ecology, 2010, Site Visit.

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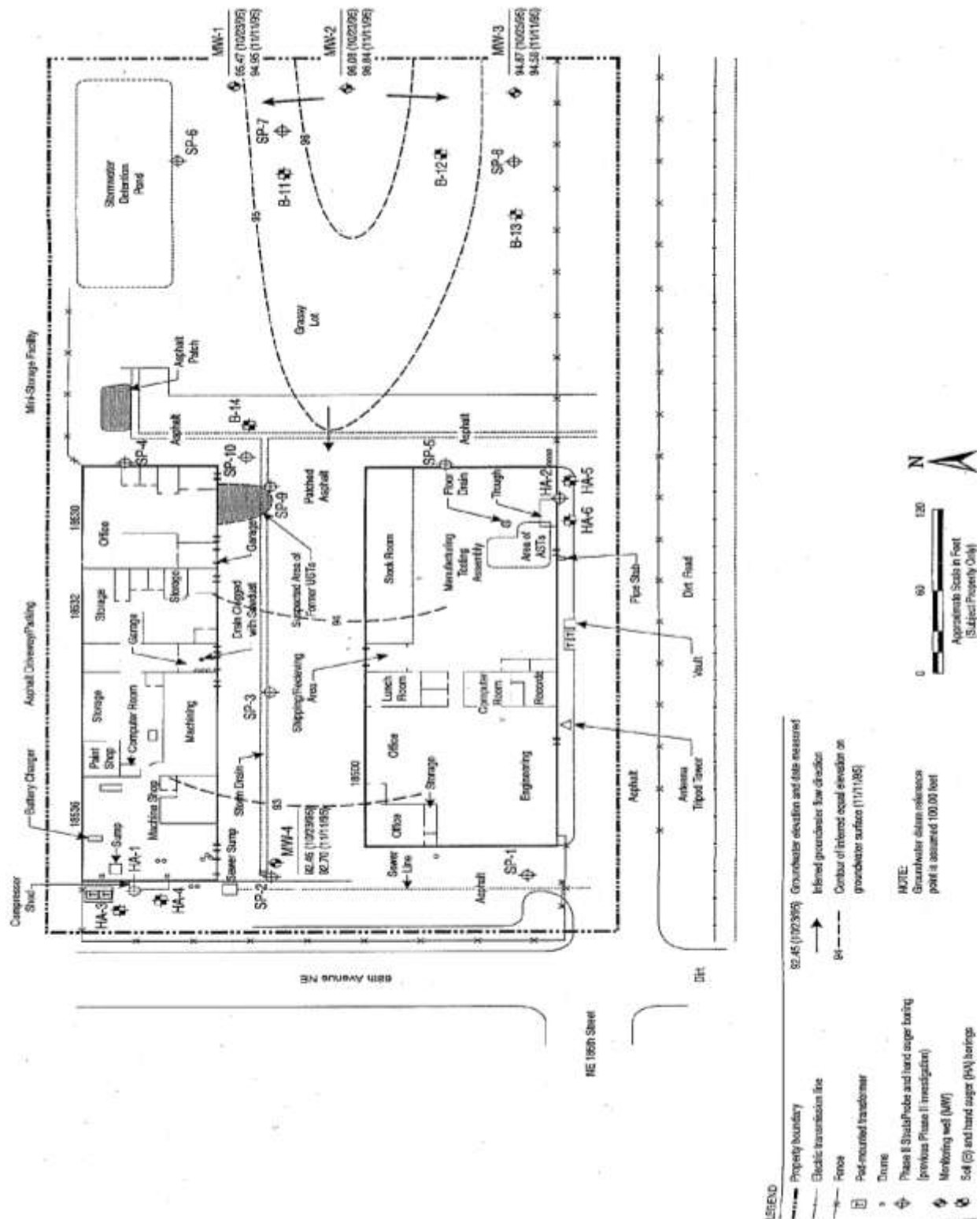
## **6.0 APPENDICES**

## 6.1 Vicinity Map

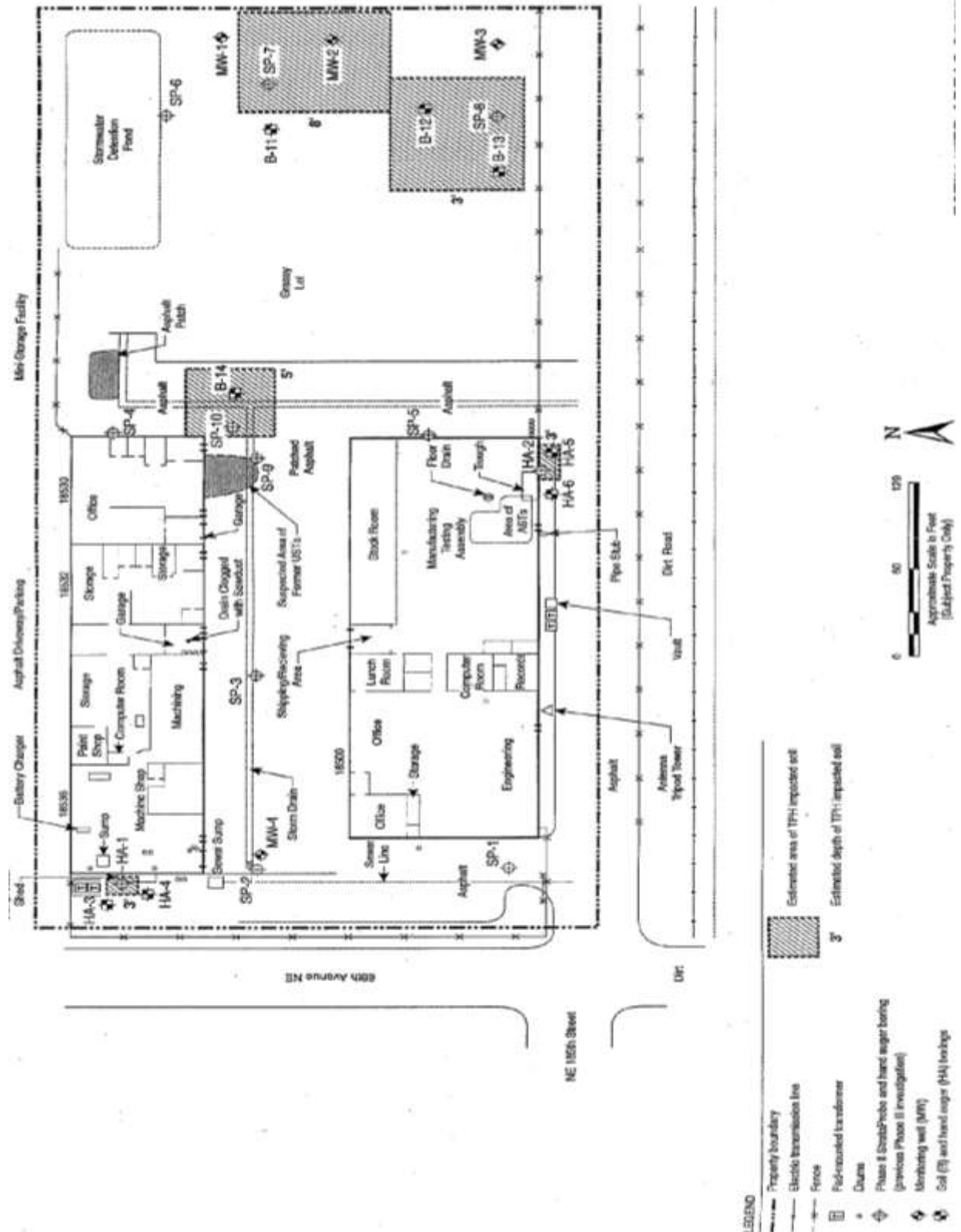




## 6.2 Site Plan



## 6.3 Areas of Contamination Map



## 6.4 Environmental Covenant

AFTER RECORDING RETURN TO:

General Manager  
Northshore Utility District  
6830 NE 185th Street  
Kenmore, WA 98028-2701



18990930001727  
PAGE 001 OF 006  
09/30/1999 12:17  
KING COUNTY, WA

**RESTRICTIVE COVENANT**

**GRANTOR(S):** Northshore Utility District, a Washington municipal corporation

**GRANTEE(S):** The Public

**LEGAL DESCRIPTION:**

The south half of the southwest quarter of the southwest quarter of the southwest quarter of Section 1, Township 26 North, Range 4 East, Willamette Meridian, in King County, Washington.

**ASSESSOR'S PROPERTY TAX PARCEL**

**ACCOUNT NUMBER(S):** 012604-9046-02

This declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f and g), and WAC 173-340-440 Northshore Utility District, a Washington municipal corporation, its successors and assigns, and the Washington State Department of Ecology, its successors and assigns.

**AFTER RECORDING RETURN TO:**

General Manager  
Northshore Utility District  
6830 NE 185th Street  
Kenmore, WA 98028-2701

**RESTRICTIVE COVENANT**

Northshore Utility District, Real Property located at 6830 NE 185th Street, Kenmore, WA 98028

This Declaration of Restrictive Covenant is made pursuant to RCW 70.105D.030(1)(f) and (g) and WAC 173-340-440 by Northshore Utility District, its successors and assigns, and the State of Washington Department of Ecology, its successors and assigns (hereafter "Ecology").

An independent remedial action (hereafter "Remedial Action") occurred at the property that is the subject of this Restrictive Covenant. The Remedial Action conducted at the property is described in the following documents:

1. Phase I Environmental Site Assessment and Asbestos Assessment dated July 19, 1995.
2. Report: Phase II Environmental Assessment dated September 22, 1995.
3. Report: Supplemental Phase II Environmental Site Assessment dated November 20, 1995.

These documents are on file at Ecology's Northwest Regional Office.

This Restrictive Covenant is required because the Remedial Action resulted in residual concentrations of total petroleum hydrocarbons (TPH) which exceed the Model Toxics Control Act Method A Residential Cleanup Levels for soil and groundwater established under WAC 173-340-440.

The undersigned, Northshore Utility District is the fee owner of real property (hereafter "Property") in the County of King, State of Washington, that is subject to

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this Restrictive Covenant. The Property is legally described in attachment A of this restrictive covenant and made a part hereof by reference.

The Northshore Utility District makes the following declaration as to limitations, restrictions, and uses to which the Property may be put and specifies that such declarations shall constitute covenants to run with the land, as provided by law and shall be binding on all parties and all persons claiming under them, including all current and future owners of any portion of or interest in the Property (hereafter "Owner").

Section 1.

No groundwater may be taken for any use from the Property.

A portion of the Property contains total petroleum hydrocarbons contaminated soil located at:

- (1) Soil in the grassy area on the east side of the property in the vicinity of SP-7, SP-8, B-12, B-13, and MW-2.
- (2) Soil in the area at the southeast corner of the north building in the vicinity of SP-10 and B-14.
- (3) Soil in the area at the southeast corner of the south building in the vicinity of HA-2 and HA-5.
- (4) Soil inside the compressor shed.

The Owner shall not alter, modify, or remove the existing structures in any manner that may result in the release or exposure to the environment of that contaminated soil or create a new exposure pathway without prior written approval from Ecology.

Any activity on the Property that may result in the release or exposure to the environment of the contaminated soil that was contained as part of the Remedial Action, or create a new exposure pathway, is prohibited. Some examples of activities that are prohibited in the capped areas include: drilling, digging, placement of any objects or use of any equipment which deforms or stresses the surface beyond its load bear

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capability, piercing the surface with a rod, spike or similar item, bulldozing or earthwork.

Section 2. Any activity on the Property that may interfere with the integrity of the Remedial Action and continued protection of human health and the environment is prohibited.

Section 3. Any activity on the Property that may result in the release or exposure to the environment of a hazardous substance that remains on the Property as part of the Remedial Action, or create a new exposure pathway, is prohibited without prior written approval from Ecology.

Section 4. The Owner of the property must give thirty (30) days advance written notice to Ecology of the Owner's intent to convey any interest in the Property. No conveyance of title, easement, lease, or other interest in the Property shall be consummated by the Owner without adequate and complete provision for continued monitoring, operation, and maintenance of the Remedial Action.

Section 5. The Owner must restrict leases to uses and activities consistent with the Restrictive Covenant and notify all lessees of the restrictions on the use of the Property.

Section 6. The Owner must notify and obtain approval from Ecology prior to any use of the Property that is inconsistent with the terms of this Restrictive Covenant. Ecology may approve any inconsistent use only after public notice and comment.

Section 7. The Owner shall allow authorized representatives of Ecology the right to enter the Property at reasonable times for the purpose of evaluating the Remedial Action; to take samples, to inspect remedial actions conducted at the property, and to inspect records that are related to the Remedial Action.

Section 8. The Owner of the Property reserves the right under WAC 173-340-440 to record an instrument that provides that this Restrictive Covenant shall no longer limit use of the Property or be of any further force or effect. However, such an instrument may be recorded only if Ecology, after public notice and opportunity for comment, concurs.

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NORTHSHORE UTILITY DISTRICT,  
a Washington municipal corporation

By R. Daniel Olson  
R. Daniel Olson  
Its General Manager

Dated: 9/28/99

STATE OF WASHINGTON     )  
                                      ) Ss:  
COUNTY OF KING         )

I certify that I know or have satisfactory evidence that R. Daniel Olson is the person who appeared before me, and said person acknowledged that he signed this instrument, on oath stated that he was authorized to execute the instrument and acknowledged it as the General Manager of Northshore Utility District, a municipal corporation, to be the free and voluntary act of such municipal corporation for the uses and purposes mentioned in the instrument.

Dated 9-28-99

George Dammever

NAME: GEORGE DAMMEVER

(Print Name)

Notary Public in and for the State of  
Washington.

Commission Expires: 8-14-2000



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**EXHIBIT A  
LEGAL DESCRIPTION**

The real property referred to is situated in the state of Washington, County of King, and is legally described as follows:

The south half of the southwest quarter of the southwest quarter of the southwest quarter of Section 1, Township 26 North, Range 4 East, Willamette Meridian, in King County, Washington; EXCEPT the west 30 feet thereof conveyed to King County for road by deed recorded under Recording Number 2529257; AND EXCEPT the south 30 feet thereof condemned by the City of Seattle for pipeline under King County Superior Court Cause No. 514489.

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## 6.5 Photo log

**Photo 1: Entrance sign near NE 185<sup>th</sup> and 68<sup>th</sup> NE intersection - from the southeast**



**Photo 2: An area of covered contamination – inside compound between bldgs looking east**



**Photo 3: Monitoring wells are installed in water meter boxes**



**Photo 4: Monitoring well 2 with water meter box cover off – inside cover barely visible**

